KINGSWINFORD ACADEMY
ASPIRE TO EXCELLENCE

Year 11 Achieve Excellence - Parent Support Guide *SEPARATE SCIENCES (TRIPLE SCIENCE)*

Exam Board: **AQA (GCSE Biology 8461, GCSE Chemistry 8462 and GCSE Physics 8463)**

Assessment:

- Six terminal examination papers of 1 hour and 45 minutes each
- Comprising of two examination papers in each of Biology, Chemistry and Physics
- Each examination paper is out of 100 marks and is equally weighted at 50% of the final grade as each subject is graded independently
- Examinations are available at two tiers of entry - Foundation and Higher tier
- Examination questions take the following forms: Multiple choice, closed, structured short answer, and open response (longer answer)
- Questions covering the 28 'Required Practicals' - at least 15% of the overall marks available:
    - To examine the key scientific concepts (knowledge and understanding)
    - To examine investigative skills - hypotheses, variables, handling data etc
    - To examine mastery of practical skills - use of specialist equipment, hazards/risk etc
- Questions testing mathematical skills in Science - this is 20% of the assessment in total *(10% in Biology papers, 20% in Chemistry papers and 30% in Physics papers)* and covers arithmetic and numerical computation, handling data and graphical skills
- The exams will measure how students have achieved the following Assessment Objectives:

Assessment Objective		Weighting
AO1	Demonstrate knowledge and understanding of: scientific ideas; scientific techniques and procedures.	40%
AO2	Apply knowledge and understanding of: scientific ideas; scientific enquiry, techniques and procedures.	40%
AO3	Analyse information and ideas to: interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedures.	20%

There is no coursework in Separate Sciences.

Course Overview:

In Year 11 the priorities for the Separate Science courses are as follows:

- Completion of course content (teaching of Paper 2 material)
- Completion of Paper 1 (October/November) and Paper 2 (February) mock exams
- Reteaching of the 'Required Practicals'
- Practising 'Working Scientifically' skills for Science
- Practising mathematical skills for Science
- Revision of Paper 1 and Paper 2 material and exam practice until the final examinations.

Key content/ skills covered:

Biology Topics	Chemistry Topics	Physics Topics
1. Cell biology 2. Organisation 3. Infection and response 4. Bioenergetics 5. Homeostasis and response 6. Inheritance, variation and evolution 7. Ecology	1. Atomic structure and the periodic table 2. Bonding, structure and the properties of matter 3. Quantitative chemistry 4. Chemical changes 5. Energy changes 6. The rate and extent of chemical change 7. Organic chemistry 8. Chemical analysis 9. Chemistry of the atmosphere 10. Using resources	1. Energy 2. Electricity 3. Particle model of matter 4. Atomic structure 5. Forces 6. Waves 7. Magnetism and electromagnetism 8. Space Physics

Working Scientifically Skills

Working scientifically is the sum of all the activities that Scientists do. It is so important that it is woven throughout the specification and the written papers. This includes: investigating, observing, experimenting or testing out ideas/hypotheses, thinking about them and evaluating them.

- Development of scientific thinking
- Experimental skills, strategies, analysis and evaluation
- Use/application of scientific vocabulary, quantities, units, symbols and nomenclature
- Mathematical skills: Arithmetic and numerical computation, handling data and graphical skills.

Dates of key assessments and deadlines:

19/10/26 - 06/11/26 - Year 11 Mock Examinations 1 (Paper 1 content)
08/02/27 - 26/02/27 - Year 11 Mock Examinations 2 (Paper 2 content)

FINAL EXAM TIMETABLE FOR SEPARATE SCIENCES

SUMMER 2027			
Biology Paper 1	Tuesday 11th May 2027	Morning	Topics 1-4
Chemistry Paper 1	Monday 17th May 2027	Morning	Topics 1-5
Physics Paper 1	Tuesday 25th May 2027	Morning	Topics 1-4
HALF TERM			
Biology Paper 2	Thursday 10th June 2027	Morning	Topics 5-7
Chemistry Paper 2	Tuesday 15th June 2027	Morning	Topics 6-10
Physics Paper 2	Friday 18th June 2027	Morning	Topics 5-8

Links to past papers and revision guides:

- Suggested Revision Guides can be found here
- Past papers can be found here: Biology, Chemistry, Physics

Links to revision sites/resources:

- Padlet 1 (Paper 1 Resources) Padlet 2 (Paper 2 Resources)
- BBC Bitesize: Biology, Chemistry, Physics

Point(s) of contact:

- If there are any questions, please contact your child's Science teacher in the first instance.
- Mrs Castle, Faculty Director (dcastle@kingswinford.windsoracademytrust.org.uk)